

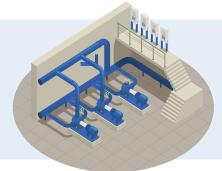
USAT | CASE STUDY



LIFT STATION MONITORING WITH DIGI

Remote Management of Lift Stations

Lift stations are a critical part of wastewater collection and treatment systems. Depending on the size of the communities they serve, municipal wastewater utilities might need to monitor and maintain dozens to hundreds of lift stations in remote areas, both expensive and time-consuming. As legacy landline and radio-based telemetry systems reach the end of life, utilities should upgrade to wireless monitoring systems that provide better access to data and are less costly to install and maintain.



Case Overview | OPTIMIZING LIFT STATION PERFORMANCE

A major wastewater utility with several dozen lift stations scattered through their municipality reached out to USAT to help them update their communications infrastructure. With aging hardware and constant data gaps, they were in serious need of an upgrade.

They needed solutions that would ensure the efficiency of their wastewater treatment operations and work to actively prevent system failures. At all times, their internal operators need to know if remote pumps are working properly without the need of constant site visits.

Challenges Faced

Minimize Failures

From pump failures to power outages and even act of vandalism, a lift station failure of any kind can result in sewer overflows, contaminated water, or environmental damage that come with hefty fines. Digi wireless connectivity enables real-time alarm and flow data so operators can address problems before they become catastrophes.

Improve Performance

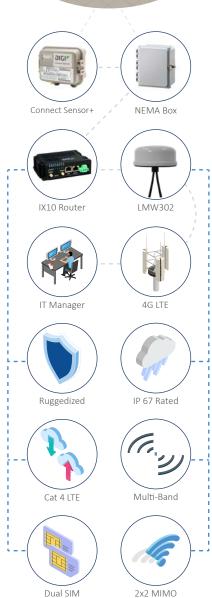
Cellular solutions from Digi make it possible to collect data for historic trends to help engineers better understand the variables affecting lift station performance and make adjustments to optimize operations.

Reduce Costs

For many utilities, the cost of maintaining copper wiring has become prohibitive. Implementing Digi wireless connectivity reduces expenses and eliminates the need to deploy truckrolls to remote stations to manually monitor equipment and sensors. Additionally, Digi wireless solutions make it easier to comply with the guidelines and requirements of the Critical Infrastructure Protection (CIP) Act and avoid fines.

Withstand Conditions

Our lift station solutions are designed to withstand the most demanding applications and environments to ensure long-lasting performance, and Digi backs them up with expert technical support.



USAT can provide your organization the business-critical IoT connectivity solutions it needs for the real-time monitoring and control of wastewater lift stations.







Digi Connect Sensor+ and IX10 Routers

With its flexible power options and weatherproof enclosure, the Digi Connect Sensor+ (DCS+) is ideal for deployment to rugged and remote areas, including lift stations, sewers, and more. The DCS+ wirelessly reports data from level, flow, pH and other commonly used sensors by the water and wastewater industry.

The Digi IX10 is a flexible and reliable 4G LTE router designed for the challenges of water and wastewater management. Digi Remote Manager (DRM) lets you monitor, manage, and control devices from a single central, secure platform. Utilizing the IX10 and DRM, USAT can help SCADA engineers quickly deploy a complete 4G LTE solution to connect their assets, gather and integrate data, and remotely manage network devices.





Shipped Ready and Delivered "Hot"

Water utilities employ the experts at USAT to pre-configure all their devices prior to shipment. USAT worked with Digi International to build templates that met the utilities exacting needs and worked with Verizon to get every device activated on their network.

Accordingly, every device we delivered was ready for immediate installation within their controller housings, ready to be plugged in and powered on. After installation, each router and antenna pair enabled nearly instant connectivity to Verizon's private network.

With the addition of signal boosting antennas from Mobile Mark, they saw nearly overnight improvement to lift station monitoring systems- remotely managing their systems in real-time.

Why Choose USAT?

For the last 25 years USAT has provided expert IoT connectivity solutions to water and waste management agencies. Our team supports every aspect of mission-critical lift station connectivity projects. We engineer solutions that utilize only top-tier cellular equipment from the most trusted manufacturers worldwide.

Our DevProv+ services team configures, provisions, kits and ships your devices hot and ready for immediate use. And our installation teams ensure your devices are functioning securely, reliably, and at peak performance.

Reach out to USAT today to rapidly deploy cellular solutions that meet your agencies exacting traffic management needs.



CONTACT ONE OF OUR SOLUTIONS ENGINEERS TODAY







